

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND REGION
ONE CONGRESS STREET
BOSTON, MASSACHUSETTS 02114-2023

FACT SHEET

DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

NPDES PERMIT NO.: MA0101893

NAME AND ADDRESS OF APPLICANT:

Town of Wareham
54 Marion Road
Wareham, Massachusetts 02571

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Wareham Water Pollution Control Facility
6 Tony's Lane
Wareham, Massachusetts 02571

RECEIVING WATER: Agawam River (Buzzards Bay Watershed)

CLASSIFICATION: SB

I. Proposed Action, Type of Facility, and Discharge Location.

The above named applicant has requested that the U.S. Environmental Protection Agency reissue its NPDES permit to discharge into the designated receiving water. The facility is engaged in collection and treatment of domestic wastewater. The discharge is from the wastewater treatment plant. See **Attachment B** for wastewater treatment facility and outfall locations.

II. Description of Discharge.

A quantitative description of the discharge in terms of significant effluent parameters based on recent monitoring data is shown on **Attachment A**.

III. Limitations and Conditions.

The effluent limitations of the draft permit and the monitoring requirements may be found in the draft NPDES permit.

IV. Permit Basis and Explanation of Effluent Limitation Derivation

A. General Regulatory Background

Congress enacted the Clean Water Act (CWA), “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” CWA § 101(a). To achieve this objective, the CWA makes it unlawful for any person to discharge any pollutant into the waters of the United States from any point source, except as authorized by specified permitting sections of the CWA, one of which is Section 402. See CWA §§ 301(a), 402(a). Section 402(a) establishes one of the CWA’s principal permitting programs, the National Pollutant Discharge Elimination System (NPDES). Under this section of the CWA, EPA may “issue a permit for the discharge of any pollutant, or combination of pollutants” in accordance with certain conditions. See CWA § 402(a). NPDES permits generally contain discharge limitations and establish related monitoring and reporting requirements. See CWA § 402(a)(1)-(2).

Section 301 of the CWA provides for two types of effluent limitations to be included in NPDES permits: “technology-based” limitations and “water quality-based” limitations. See CWA §§ 301, 304(b); 40 C.F.R. 122, 125, 131. Technology-based limitations, generally developed on an industry-by-industry basis, reflect a specified level of pollutant reducing technology available and economically achievable for the type of facility being permitted. See CWA § 301(b). As a class, POTW’s must meet performance-based requirements based on available wastewater treatment technology. CWA § 301(b)(1)(B). The performance level for POTWs is referred to as “secondary treatment”. Secondary treatment is comprised of technology-based requirements expressed in terms of BOD₅, TSS, and pH. 40 C.F.R. Part 133.

Water quality-based effluent limits are designed to ensure that State water quality standards are met regardless of the decision made with respect to technology and economics in establishing technology-based limitations. In particular, Section 301(b)(1)(C) requires achievement of, “any more stringent limitation, including those necessary to meet water quality standards...established pursuant to any State law or regulation...” See 40 C.F.R. §§ 122.4(d), 122.44(d)(1) (providing that a permit must contain effluent limits as necessary to protect State water quality standards, “including State narrative criteria for water quality”) (emphasis added) and 122.44(d)(5) (providing in part that a permit incorporate any more stringent limits required by Section 301(b)(1)(C) of the CWA).

The CWA requires that States develop water quality standards for all water bodies within the State. CWA § 303. These standards have three parts: (1) one or more “designated uses” for each water body or water body segment in the state; (2) water quality “criteria”, consisting of numeric concentration levels and/or narrative statements specifying the amounts of various pollutants that may be present in each water body without impairing the designated uses of that

water body; and (3) an antidegradation provision, focused on protecting high quality waters and protecting and maintaining water quality necessary to protect existing uses. CWA § 303(c)(2)(A), 40 C.F.R. § 131.12. The limits and conditions of the permit reflect the goal of the CWA and EPA to achieve and then to maintain water quality standards.

Receiving stream requirements are established according to numeric and narrative standards adopted under State law for each stream classification. When using chemical-specific numeric criteria from the State's water quality standards to develop permit limits, both the acute and chronic aquatic life criteria are used and expressed in terms of maximum allowable in stream pollutant concentrations. Acute aquatic life criteria are generally implemented through average monthly limits. Where a State has not established a numeric water quality criterion for a specific chemical pollutant that is present in the effluent in a concentration that causes or has a reasonable potential to cause a violation of narrative water quality standards, the permitting authority must establish effluent limits in one of three ways: based on a "calculated numeric criterion for the pollutant which the permitting authority demonstrates will attain and maintain applicable narrative water quality criteria and fully protect the designated use"; on a "case-by-case basis" using CWA Section 304(a) recommended water quality criteria, supplemented as necessary by other relevant information; or, in certain circumstances, based on an indicator parameter. 40 C.F.R. § 122.44(d)(1)(vi)(A-C).

All statutory deadlines for meeting various treatment technology-based effluent limitations established pursuant to the CWA have expired. When technology-based effluent limits are included in a permit, compliance with those limitations is from the date the issued permit becomes effective. See 40 C.F.R. § 125.3(a)(1). Compliance schedules and deadlines not in accordance with the statutory provisions of the CWA cannot be authorized by an NPDES permit. The regulations governing EPA's NPDES permit program are generally found in 40 C.F.R. Parts 122, 124, 125, and 136.

B. Introduction

The permit must limit any pollutant parameter (conventional, non-conventional, toxic, and whole effluent toxicity) that is or may be discharged at a level that causes or has "reasonable potential" to cause or contribute to an excursion above any water-quality criterion, see 40 C.F.R. §122.44(d)(1)(i). An excursion occurs if the projected or actual in-stream concentration exceeds the applicable criterion.

Reasonable Potential

In determining reasonable potential, EPA considers: 1) existing controls on point and non-point sources of pollution; 2) pollutant concentration and variability in the effluent and receiving water as determined from the permit's reissuance application, DMRs, and State and Federal Water Quality Reports; 3) sensitivity of the species to toxicity testing; 4) the statistical approach outlined in *Technical Support Document for Water Quality-Based Toxics Control*, March 1991, EPA/502/2-90-001 in Section 3; and, where appropriate, 5) dilution of the effluent in the receiving water.

Anti-Backsliding

Section 402(o) of the CWA generally provides that the effluent limitations of a renewed, reissued, or modified permit must be at least as stringent as the comparable effluent limitations in the previous permit. EPA has also promulgated anti-backsliding regulations which are found at 40 C.F.R. § 122.44(l). Unless applicable anti-backsliding requirements are met, the limits and conditions in the reissued permit must be at least as stringent as those in the previous permit.

State Certification

Section 401(a)(1) of the CWA requires all NPDES permit applicants to obtain a certification from the appropriate state agency stating that the permit will comply with all applicable federal effluent limitations and State water quality standards. See CWA § 4012(a)(1). The regulatory provisions pertaining to State certification provide that EPA may not issue a permit until a certification is granted or waived by the state in which the discharge originates. 40 C.F.R. § 124.53(a). The regulations further provide that, “when certification is required...no final permit shall be issued...unless the final permit incorporates the requirements specified in the certification under § 124.53(e).” 40 C.F.R. § 124.55(a)(2). Section 124.53(e) in turn provides that the State certification shall include “any conditions more stringent than those in the draft permit which the State finds necessary” to assure compliance with, among other things, State water quality standards, see 40 C.F.R. § 124.53(e)(2), and shall also include “[a] statement of the extent to which each conditions of the draft permit can be made less stringent without violating the requirements of State law, including water quality standards”, see 40 C.F.R. § 124.53(e)(3).

However, when EPA reasonably believes that a State water quality standard requires a more stringent permit limitation than that reflected in a state certification, it has an independent duty under CWA § 301(b)(1)(C) to include more stringent permit limitations. See 40 C.F.R. §§ 122.44(d)(1) and (5). It should be noted that under CWA § 401, EPA’s duty to defer to considerations of state law is intended to prevent EPA from relaxing any requirements, limitations, or conditions imposed by State law. Therefore, “[a] State may not condition or deny a certification on the grounds that State law allows a less stringent permit condition.” 40 C.F.R. § 124.55(c). In such an instance, the regulation provides that, “The Regional Administrator shall disregard any such certification conditions or denials as waivers of certification.” Id. EPA regulations pertaining to permit limits based upon water quality standards and state requirements are contained in 40 C.F.R. § 122.4(d) and 40 C.F.R. § 122.44(d).

C. POTW Description and Effluent Limitations :

The Town owns and operates a 1.56 million gallon per day (MGD) advanced secondary wastewater treatment facility, which currently treats an average flow of 1.0 MGD. A facility upgrade for nutrient removal was completed in August 1, 2005, and effluent limitations for total nitrogen and total phosphorus became effective on April 1, 2006. The facility is an extended aeration secondary treatment facility with denitrification filters and ultraviolet light (UV) disinfection.

Raw wastewater enters the headworks where grit and screenings are removed from the waste stream prior to flowing to two anoxic mixing zones. Return activated sludge and internal recycle (IR) flows are pumped to a mixing chamber and introduced to the raw wastewater after the headworks and just prior to anoxic mixers. This is followed by aeration tanks (2), three secondary clarifiers, de-nitrification filters, UV disinfection and final discharge to the Agawam River.

Secondary sludge is wasted to sludge holding tanks where it is decanted and then thickened on a gravity belt thickener. Thickened sludge (4% - 6% solids) is then stored in another sludge holding tank and is trucked off in a liquid state for incineration at Cranston, RI.

D. 7Q10 and Dilution Factor

The Massachusetts Water Quality Standards, at 314 CMR 4.03(3), require that in rivers and streams, water quality criteria must be met at the lowest mean flow for seven consecutive days to be expected once in ten years (7Q10). An estimate of the Agawam River 7Q10 flow at the point of discharge is as follows:

“Water Resources of the Coastal Drainage Basins of Southeastern Massachusetts, Plymouth to Weweantic River, Wareham, by John R. Williams and Gary D. Tasker 1974” includes the following information on the Agawam River drainage area: Of the 20 square mile drainage basin, 6.7 square miles are in region 1 of the drainage basin, which has a flow factor of 1.0 cubic feet per second (cfs)/square mile and 10.3 square miles are in region 2 of the drainage basin, which has a flow factor of 0.4 cfs /square mile.

The 7Q10 can then be calculated as follows:

$$7Q10 = 6.7 \text{ sq miles} \times 1.0 \text{ cfs/sq mile} + 10.3 \text{ sq miles} \times 0.40 \text{ cfs/sq mile} = 10.8 \text{ cfs}$$

The March 2002 Comprehensive Wastewater Management Plan (CWMP), completed by Camp Dresser & McKee for the Town of Wareham, includes daily stream flow measurements for 1999. In addition, the CWMP documents the highly regulated nature of the Agawam River basin. The lowest 7 day flow during 1999, a year in which many watersheds experienced 7Q10 flow conditions, was 11 cfs. This data is consistent with the above 7Q10 flow estimate.

This is the same 7Q10 used in the current permit.

Dilution Factor

The following dilution factor is calculated using the 7Q10 of the receiving water and the design flow of the discharge. The dilution factor was then used to calculate water quality based limits for copper, and was used to determine reasonable potential for the discharge to cause or contribute to exceedances of other water quality criteria. The current permit has a dilution factor of 5.8 based on a design flow of 1.46 mgd. The draft permit has a dilution factor of 5.5 based on

a design flow of 1.56 mgd. See below :

$$\begin{aligned}\text{Dilution Factor} = \text{DF} &= (\text{discharge design flow} + 7\text{Q10}) / \text{discharge design flow} \\ &= (2.41 \text{ cfs} + 10.8 \text{ cfs}) / 2.41 \text{ cfs} = 5.5\end{aligned}$$

where the discharge design flow = 1.56 MGD = 2.41 cfs, and
7Q10 = 10.8 cfs

E. Pollutants

Conventional Pollutants

The effluent limitations for BOD, TSS, fecal coliform, and pH are the same as those limits found in the previous permit. These limits are based on State Water Quality Standards and also required for state certification under Section 401(a)(1) of the CWA, as described in 40 CFR 124.53 and 124.55. The current permit has monthly average and weekly average mass loadings of 150.1 lbs/day and 195.3 lbs/day respectively for BOD and TSS. The monthly average limit was based on a monthly average flow of 1.8 MGD which was allowed in the previous permit and the weekly average limit was based on an annual average flow of 1.56 MGD. The same will continue in the draft permit.

In addition, EPA has established limits and monthly monitoring requirement for Enterococcus bacteria to protect primary contact recreational uses. The limits are based on state water quality criteria, approved by EPA on September 19, 2007.

Toxic Pollutants

The receiving water has been classified as a Class SB waterway by the state. The designated uses for a Class SB water are 1) the protection and propagation of fish, other aquatic life and wildlife and 2) for primary and secondary contact recreation.

Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on water quality standards. The Massachusetts Surface Water Quality Standards include requirements for the regulation and control of toxic constituents and also require that EPA criteria, established pursuant to Section 304(a) of the CWA, shall be used unless a site specific criteria is established. The State will limit or prohibit discharges of pollutants to surface waters to assure that surface water quality standards of the receiving waters are protected and maintained, or attained.

Chlorine

Chlorine is no longer used for disinfection of the effluent. It has been replaced with an ultraviolet (UV) system. Monitoring requirements and limits for chlorine have not been included in the draft permit.

Metals

Certain metals can be toxic to aquatic life. EPA has evaluated the reasonable potential for metals in the discharge to cause or contribute to excursions of water quality standards (see calculations below). Based on this evaluation, EPA has determined that there is no reasonable potential for any metal to cause or contribute to an excursion of water quality standards.

Calculation of reasonable potential for copper, lead, zinc and cadmium:

All effluent metals data, except for copper, are taken from the toxicity test reports from the period of December 2004 to December 2006. Copper is routinely monitored as a condition of the current permit, so data from the discharge monitoring reports was used. Additionally, because the facility upgrade was completed in August, 2006, the data from that date through September 2007 was used to characterize effluent concentrations for copper. This data shows that effluent copper concentrations vary from 1.0 ug/l to 10 ug/l. A close review of the other metals data collected since the start up of the upgraded facility was not necessary because, as the following calculations show, there is no reasonable potential for those metals using the pre-upgrade data.

Allowable Discharge Concentration, $C = \text{Criteria (Total Recoverable)} \times \text{Dilution Factor}$

The water quality criteria used in the equation are from National Recommended Water Quality Criteria: 2002. The criteria shown in the tables in this document are for dissolved metals. Federal regulations found at 40 CFR 122.45(c) require that effluent limitations for metals be expressed in terms of total recoverable metal. The dissolved criteria were therefore divided by the conversion factors shown in Appendix A of the document to calculate total recoverable criteria.

Copper :	Chronic	$C = 3.1 \times 5.5 / 0.83 = 20.5 \text{ ug/l}$, which is more than the monthly average effluent concentration range of 1-10 ug/l. So, reasonable potential does not exist.
	Acute	$C = 4.8 \times 5.5 / .83 = 31.8 \text{ ug/l}$ which is more than the maximum effluent concentration of 10 ug/l. So, reasonable potential does not exist.
Lead :	Chronic	$C = 8.1 \times 5.5 / .951 = 46.8 \text{ ug/l}$ which is greater than the monthly average effluent concentration range of 5 – 22 ug/l. So, reasonable potential does not exist.
	Acute	$C = 210 \times 5.5 / .951 = 1214 \text{ ug/l}$ which is greater than the maximum effluent concentration of 22 ug/l. So, reasonable potential does not exist.

Zinc :	Chronic	$C = 81 \times 5.5/.946 = 471 \text{ ug/l}$ which is far greater than the monthly average effluent concentration range of 13- 69 ug/l. So, reasonable potential does not exist.
	Acute	$C = 90 \times 5.5/.946 = 523 \text{ ug/l}$ which is far greater than the maximum effluent concentration of 69 ug/l. So, reasonable potential does not exist.
Cadmium :	Chronic	$C = 9.3 \times 5.5/.994 = 51.5 \text{ ug/l}$ which is greater than the monthly average effluent concentration of 1 ug/l. So, reasonable potential does not exist.
	Acute	$C = 42 \times 5.5/.994 = 232 \text{ ug/l}$ which is far greater than the maximum effluent concentration of 1 ug/l. So, reasonable potential does not exist.

Copper :

The current permit requires monthly monitoring for copper but has no effluent limit. The draft permit will continue with the same requirement and maintains a monitoring frequency of one sample per month. This data is necessary to evaluate how the upgraded treatment facility is controlling copper.

Nutrients

The current permit contains seasonal effluent limits for total nitrogen (a seasonal average of 4.0 mg/l based on the average discharge concentration for the months of April through October) and phosphorus (a monthly average of 0.2 mg/l for the months of April through October). These limitations were established based on the reasonable potential for the wastewater treatment plant to cause or contribute to the excursions of water quality standards. These excursions are documented in the **Massachusetts Year 2006 Integrated List of Waters**, which lists the Agawam River, from the Wareham WWTP to the confluence with the **Wankinko** River at the Rte 6 Bridge in Wareham as impaired for unknown toxicity, unionized ammonia, nutrients, pathogens, noxious aquatic plants, and other habitat alterations based on data collected before wastewater treatment facility upgrade.

The 1991 Buzzards Bay Comprehensive Conservation and Management Plan (CCMP) defined the Wareham River estuary as a nitrogen-impacted embayment, and concluded that the contributing sources of nitrogen needed to be reduced through remedial action. To gather additional information about the health of the estuary and the sources of nutrients to the embayment, the Town of Wareham commissioned Camp Dresser and McKee (CDM) to collect data on nutrients in the watershed and estuary. The data were analyzed in the report Water Quality Investigation of the Wareham River Estuary Complex (June 2000). These data indicated that water quality in the Agawam River Estuary is degraded, particularly during the summer

(e.g., August/September chlorophyll levels as high as 100 ug/l). While the watershed delivers a significant load of nutrients, the inorganic nutrients (both nitrogen and phosphorus) in the Wareham WPCF discharge were identified as a more significant driver of reduced water quality in the Agawam River Estuary.

Accordingly, seasonal nutrient limitations were established in the current permit based on highest and best practical level of treatment for point sources of nutrients causing or contributing to eutrophication (see 314 CMR 4.04(5)). The limits became effective on April 1, 2006.

A review of the effluent data submitted by the Town since these limits became effective indicates that the limit for total nitrogen has been achieved, but that the limit for total phosphorus has not been consistently achieved (see Attachment A).

The fact sheet for the current permit noted that a TMDL was anticipated to be completed over the next two to three years and would refine current and allowable loadings and determine what, if any, further reductions in watershed loadings are necessary to achieve standards. The TMDL has not, however, been completed and MassDEP does not anticipate completing it until summer of 2009.

Receiving water quality data collected by the Coalition for Buzzards Bay in 2006 and 2007 shows that the receiving water continues to experience high concentrations of chlorophyll a and nutrients. The draft permit continues the existing limits on nitrogen and phosphorus pending completion of a TMDL. If the TMDL or other water quality information shows that the treatment plant discharge causes or contributes to violations of water quality standards, the permit may be reopened and modified to include any necessary effluent limitations.

Whole Effluent Toxicity

EPA's **Technical Support Document for Water Quality-based Toxics Control, EPA/505/2-90-001, March 1991**, recommends using an "integrated strategy" containing both pollutant (chemical) specific approaches and whole effluent (biological) toxicity approaches to control toxic pollutants in effluent discharges from entering the nation's waterways. EPA-New England adopted this "integrated strategy" for use in permit development and issuance. These approaches are designed to protect aquatic life and human health. Pollutant-specific approaches such as those in the Gold Book and State regulations address individual chemicals, whereas, whole effluent toxicity (WET) approaches evaluate interactions between pollutants, thus rendering an "overall" or "aggregate" toxicity assessment of the effluent. Furthermore, WET measures the "additivity" and/or "antagonistic" effects of individual chemical pollutants which pollutant specific approaches do not, thus the need for both approaches. In addition, the presence of an unknown toxic pollutant can be discovered and addressed through this process.

Federal NPDES regulations at 40 CFR §122.44(d)(1)(v) require whole effluent toxicity limits in a permit when a discharge has a "reasonable potential" to cause or contribute to an excursion above the State's narrative criterion for toxicity. Furthermore, results of these toxicity tests will demonstrate compliance with the no toxic provision of the MassDEP Standards.

EPA Region I has developed a toxicity control policy regarding whole effluent toxicity monitoring requirements and effluent limitations. The frequency and type of WET tests are established based on the dilution factor, under the principal that the reasonable potential for the discharge to cause or contribute to toxicity in the receiving water is inversely proportional to dilution (i.e. increased dilution results in decreased risk of instream toxicity). The dilution factor calculated for this discharge is 5.5; pursuant to EPA Region I policy, a discharge having a dilution factor of 5.5 requires chronic and acute toxicity testing four times per year with C-NOEC = 18.2% ($100/5.5 = 18.2$) and LC50 = 100%.

The current permit requires chronic and modified acute WET testing four times per year with two species. In a letter dated April 12, 2007 the permittee requested a reduction in WET testing frequency. EPA has reviewed the recent toxicity test results and found that some of the NOEC values are right at the limit and one NOEC result (9/30/2007) is at 12.5% which is below the limit of 18.2%. So, EPA has denied the request. The draft permit will continue with the same requirement as in the current and that each test include the use of Inland silverside and Sea urchin four times per year in accordance with EPA Region I protocol to be found in permit attachment A.

The draft permit contains a mechanism for reducing WET testing requirements. After four consecutive WET tests, demonstrating compliance with the permit limits for whole effluent toxicity, the permittee may submit a written request to the EPA seeking a review of the toxicity test results and a reduction in testing requirements. The EPA will review the request and pertinent information to make a determination. The permittee is required to continue testing as required by the permit until the permit is either formally modified or until the permittee receives a certified letter from the EPA indicating a change in the permit conditions.

V. Sludge

In February 1993, the Environmental Protection Agency (EPA) promulgated standards for the use and disposal of sewage sludge. The regulations were promulgated under the authority of section 405(d) of the Clean Water Act (CWA). Section 405(d) of the CWA requires that sludge conditions be included in all municipal permits. The sludge is trucked off-site to the Cranston water pollution control facility in Rhode Island for dewatering and incineration. The sludge conditions in the draft permit satisfy this requirement.

VI. Pretreatment

There are no significant or categorical industrial users discharging to the treatment plant.

Pollutants introduced into POTWs by a nondomestic source shall not pass through the POTW or interfere with the operation or performance of the treatment.

VII. Antidegradation

This draft permit is being reissued with an allowable wasteload identical or more stringent than the current permit and no change in outfall location. The State of Massachusetts has indicated that there will be no lowering of water quality and no loss of existing water uses and that no additional antidegradation review is warranted.

VIII. Essential Fish Habitat Determination (EFH)

Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. Part 1801 et seq.(1998)), EPA is required to consult with NMFS if EPA's action or proposed actions that it funds, permits, or undertakes, may adversely impact any essential fish habitat. 16 U.S.C. Part 1855(b). The Amendments broadly define essential fish habitat as: waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. 16 U.S.C. Part 1802(10). Adversely impact means any impact which reduces the quality and/or quantity of EFH. 50 C.F.R. Part 600.910(a). Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

Essential fish habitat is only designated for fish species for which federal Fisheries Management Plans exist. 16 U.S.C. Part 1855(b)(1)(A). EFH designations for New England were approved by the U.S. Department of Commerce on March 3, 1999.

Enclosed (**see Attachment C**) is the list of 17 managed species that are believed to be present during one or more life stage within EFH Area 73 (Volume II), which encompasses the existing discharge site. No "habitat areas of particular concern", as defined under §600.815(a)(9) of the Magnuson-Stevens Act, have been designated for this site. Although EFH has been designated for this general location, EPA has concluded that this activity is not likely to adversely affect EFH or its associated species for the following reasons:

- This is a reissuance of an existing permit;
- Effluent receives advanced treatment using an activated sludge process;
- The discharge from the WWTF is limited to an annual average flow of 1.56 mgd, with a high level of nitrogen and phosphorus control;
- The wastewater is largely domestic in nature;
- Effluent is discharged into the Agawam River with an estimated dilution factor of 5.5;
- Chlorine has been replaced with ultraviolet light for effluent disinfection. This will reduce the potential for toxicity in the effluent;
- Acute and chronic toxicity tests will be continued on sea urchins and inland silversides four times per year;
- The permit will prohibit any violation of state water quality standards.

Accordingly, EPA has determined that a formal EFH consultation with NMFS is not required. If adverse impacts to EFH are detected as a result of this permit action, NMFS will be notified and an EFH consultation will be promptly initiated.

IX. Endangered Species

A review of the list of endangered species at the outfall location in Agawam River indicates that there are no endangered species listed in the area. So, no further action is necessary.

X. STATE CERTIFICATION REQUIREMENTS

EPA may not issue a permit unless the Massachusetts Department of Environmental Protection with jurisdiction over the receiving waters certifies that the effluent limitations contained in the permit are stringent enough to assure that the discharge will not cause the receiving water to violate State Water Quality Standards. The staff of the Massachusetts Department of Environmental Protection has reviewed the draft permit. EPA has requested permit certification by the state pursuant to 40 CFR 124.53 and expects that the draft permit will be certified.

XI. PUBLIC COMMENT PERIOD, PUBLIC HEARING, AND PROCEDURES FOR FINAL DECISION

All persons, including applicants, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available arguments and a supporting material for their arguments in full by the close of the public comment period, to the U.S. EPA, MA Office of Ecosystem Protection, 1 Congress Street, Suite 1100 (CMA), Boston, Massachusetts 02114-2023. Any person, prior to such date, may submit a request in writing to EPA and MassDEP for a public hearing to consider the draft permit. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least thirty days public notice whenever the Regional Administrator finds that response to this notice indicates significant public interest. In reaching a final decision on the draft permit, the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston Office.

Following the close of the comment period, and after a public hearing, if such hearing is held, the Regional Administrator will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice.

XII. EPA CONTACT

Additional information concerning the draft permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays from:

Suproakash Sarker
MA NPDES Permit Program Unit
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Date

Stephen Perkins, Director
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